

## **REMARKS**

### **I. Introduction**

Claims 7-12 are pending in the present application. Claims 7-12 were rejected. Claims 8 and 9 have been amended. In view of the forgoing amendments and following remarks, it is respectfully submitted that claims 7-12 are allowable, and reconsideration is respectfully requested.

Applicant notes with appreciation the acknowledgment of the claim for foreign priority and the acknowledgment that all certified copies of the priority documents have been received.

### **II. Objection to Claims 8 and 9**

In response to the Examiner's objection to various informalities contained in claims 8 and 9, these claims have been amended in accordance with the Examiner's suggestion to eliminate the informalities.

### **III. Rejection of Claims 7 and 10-12 under 35 U.S.C. § 102(b)**

Claims 7, and 10-12 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,140,155 ("Carome"). It is respectfully submitted that claims 7 and 10-12 are not anticipated by Carome for at least the following reasons.

To anticipate a claim under § 102(b), a single prior art reference must identically disclose each and every claim element. See Lindeman Maschinenfabrik v. American Hoist and Derrick, 730 F.2d 1452, 1458 (Fed. Cir. 1984). If any claimed element is absent from a prior art reference, it cannot anticipate the claim. See Rowe v. Dror, 112 F.3d 473, 478 (Fed. Cir. 1997). Additionally, not only must each of the claim limitations be identically disclosed, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed invention, namely the inventions of the rejected claims, as discussed above. See Akzo, N.V. v. U.S.I.T.C., 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986). To the extent that the Examiner may be relying on the doctrine of inherent disclosure for the anticipation rejection, the Examiner must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics necessarily flow from the

teachings of the applied art.” (See M.P.E.P. § 2112; emphasis in original; see also Ex parte Levy, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)).

Claim 7 recites, in relevant part, a “micromechanical component” which includes “at least one spring device” and **“at least one seismic mass, the spring device being connected at a first end to the substrate and at a second end to the mass . . . wherein the spring device is designed for an intrinsically nonlinear behavior corresponding to a progressive spring characteristic curve, in which a greater acceleration is associated at least locally with a greater spring constant, so that the component exhibits, at least locally, a lesser sensitivity at greater acceleration.”** Although the Examiner contends that Figs. 1 and 10 of Carome discloses “at least one seismic mass connected to the spring device,” Carome merely discloses a glass fiber sensor having a spring element, and nothing in Carome teaches or suggests a seismic mass that is connected to an end of a spring device.

For at least the foregoing reasons, Carome does not anticipate claim 7 and its dependent claims 10-12.

#### **IV. Rejection of Claims 7 and 8 under 35 U.S.C. § 102(b)**

Claims 7 and 8 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,084,257 (“Petersen”). It is respectfully submitted that claims 7 and 8 are not anticipated by Carome for at least the following reasons.

Claim 7 recites, in relevant part, a “micromechanical component” which includes “at least one spring device” and **“at least one seismic mass, the spring device being connected at a first end to the substrate and at a second end to the mass . . . wherein the spring device is designed for an intrinsically nonlinear behavior corresponding to a progressive spring characteristic curve, in which a greater acceleration is associated at least locally with a greater spring constant,** so that the component exhibits, at least locally, a lesser sensitivity at greater acceleration.” Nothing in Petersen discloses or suggests a spring device designed for **“an intrinsically nonlinear behavior,”** or that **“a greater acceleration is associated with a greater spring constant,** so that the component exhibits . . . a lesser sensitivity at greater acceleration.”

For at least the foregoing reasons, Petersen does not anticipate claim 7 or its dependent claim 8.

V. **Rejection of Claims 7, 8, and 10 under 35 U.S.C. § 102(b)**

Claims 7, 8, and 10 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,005,275 (“Shinogi”). It is respectfully submitted that claims 7, 8, and 10 are not anticipated by Shinogi for at least the following reasons.

As noted above, claim 7 recites, in relevant part, a “micromechanical component” which includes “at least one spring device” and “at least one seismic mass, the spring device being connected at a first end to the substrate and at a second end to the mass . . . wherein **the spring device is designed for an intrinsically nonlinear behavior corresponding to a progressive spring characteristic curve, in which a greater acceleration is associated at least locally with a greater spring constant**, so that the component exhibits, at least locally, a lesser sensitivity at greater acceleration.” Nothing in Shinogi discloses or suggests a spring device “designed for an intrinsically **nonlinear behavior**,” or that “**a greater acceleration is associated with a greater spring constant**, so that the component exhibits . . . a lesser sensitivity at greater acceleration.” Although the Examiner relies on Figs. 58-59B and 64-66 of Shinogi, nothing in Shinogi actually discloses or suggests a nonlinear behavior, or that a greater acceleration is associated with a greater spring constant.

For at least the foregoing reasons, Shinogi does not anticipate claim 7 and its dependent claims 8 and 10.

VI. **Rejection of Claims 9 and 11-12 under 35 U.S.C. § 103(a)**

Claims 9 and 11-12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,005,275 (“Shinogi”) in view of either U.S. Patent No. 4,244,225 (“Greenwood”) or U.S. Patent No. 5,140,155 (“Carome”). Applicant respectfully submits that claims 9 and 11-12 are patentable over the applied references for at least the following reasons.

In rejecting a claim under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a *prima facie* case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish *prima facie* obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and

not based on the application disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim limitations. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

In support of the rejection of claim 9, the Examiner applies the teachings of Shinogi and Greenwood as suggesting the claimed subject matter. Applicant notes that claim 9 ultimately depends on claim 7. As explained above, Shinogi does not disclose or suggest each of the elements of parent claim 7, i.e., nothing in Shinogi discloses or suggests a spring device “designed for an intrinsically **nonlinear behavior**,” or that “**a greater acceleration is associated with a greater spring constant**, so that the component exhibits . . . a lesser sensitivity at greater acceleration.” Furthermore, Greenwood clearly does not disclose or suggest the elements of parent claim 7 not disclosed or suggested by Shinogi. Accordingly, even if one assumed for the sake of argument that there were some motivation to combine the teachings of Shinogi and Greenwood in the manner asserted by the Examiner, the proposed combination of Shinogi and Greenwood could not render obvious dependent claim 9.

In support of the rejection of claims 11 and 12, the Examiner applies the teachings of Shinogi and Carome. Applicant notes that claims 11 and 12 ultimately depend on claim 7. As explained above, Shinogi and Carome clearly do not disclose or suggest all of the elements of parent claim 7. Accordingly, even if one assumed for the sake of argument that there were some motivation to combine the teachings of Shinogi and Carome in the manner asserted by the Examiner, the proposed combination of Shinogi and Carome could not render obvious dependent claims 11 and 12.

Independent of the above, claim 11 recites “[t]he micromechanical component as recited in claim 10, wherein a thickness of the spring device **decreases pyramidally**,” and claim 12 recites “[t]he micromechanical component as recited in claim 11, wherein a component characteristic curve of the spring device has an **approximately logarithmic profile**.” Nothing in Shinogi and Carome discloses or suggests that a thickness of a spring device decreases pyramidally, or that a component characteristic curve of a spring device has an approximately logarithmic profile. While the Office Action cites col. 5, l. 63 – col. 6, l. 8 of Carome for teaching both of these claimed features, this cited section of Carome merely states that “[b]y appropriately varying the cross-section and thickness of the beam, the

linearity or non-linearity of the relationship between the strength of the sensed condition and the output is selectively adjusted.” Since neither Carome nor Shinogi discloses or suggests a spring device with a thickness that decreases pyramidally, as recited in claim 11, or a spring device wherein a component characteristic curve of the spring device has an approximately logarithmic profile, as recited in claim 12, the combination of Shinogi and Carome cannot render claims 11 and 12 obvious.

## VII. CONCLUSION

In view of all of the above, it is respectfully submitted that all of the presently pending claims 7-12 are in allowable condition. Prompt reconsideration and allowance of the application are respectfully requested.

Respectfully submitted,

 (P. NO. 36,197)

Dated: May 3, 2007

By: SONG LEE for Gerard Messina  
Gerard A. Messina  
(Reg. No. 35,952)

KENYON & KENYON LLP  
One Broadway  
New York, New York 10004  
(212) 425-7200

**CUSTOMER NO. 26646**